

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A device for a continuously operated dilution of a slurry sample, through which device the slurry sample is fed directly into a continuously operated optical analyzer, such as a grain size analyzer, and which device comprises elements for feeding the slurry sample, elements for feeding diluting liquid and elements for removing solids contained in the slurry, as well as elements for discharging both the liquid contained in the slurry and the liquid used for dilution, **characterized** ~~in that~~ wherein the device comprises at least one downwardly narrowing chamber (2,34) that is connected to the analyzer measurement cell (3, 34) so that two opposite walls (10, 32) of the chamber (2, 34) are essentially parallel both with respect to each other and with respect to the respective walls (21, 35) of the measurement cell (3, 34).

2. (Currently Amended) A device according to claim 1, **characterized** ~~in that~~ wherein in the device, there is installed at least one liquid conduit (13, 39) provided with a nozzle element (16, 40) in order to feed diluting liquid into the chamber (2, 34) and in order to advantageously agitate the liquid contained in the chamber.

3. (Currently Amended) A device according to claim 2, **characterized** ~~in that~~ wherein the liquid conduit (13, 39) is installed symmetrically with respect to the walls (10, 32; 9, 37) of the chamber (2, 34).

4. (Currently Amended) A device according to claim 2, **characterized** ~~in that~~ wherein the liquid conduit (13, 25-39) is provided with a nozzle element (16, 40).

5. (Currently Amended) A device according ~~any of the preceding claims, characterized in that~~ to claim 2, wherein the device comprises two downwardly narrowing chambers (1, 2) that are in liquid connection with each other and are at least partly filled with liquid.

6. (Currently Amended) A device according to claim 5, **characterized** ~~in that~~ wherein the first and second chambers (1, 2) of the device are mutually

arranged so that the bottom part (5) of the first chamber is connected to the top part (7) of the second chamber.

7. (Currently Amended) A device according to claim 5 ~~or 6~~, ~~characterized in that~~ wherein the cross-sectional area of the flow aperture of the top part (7) of the second chamber is larger than the cross-sectional area of the flow aperture of the bottom part (5) of the first chamber.

8. (Currently Amended) A device according to ~~any of the claims 5—7~~, ~~characterized in that~~ claim 5, wherein the liquid conduit (13) includes nozzle elements (15, 16) comprising one or several nozzles for feeding diluting liquid into both chambers (1, 2) in order to advantageously agitate the liquid contained in the chambers.